Welcome to STN International! Enter x:x

LOGINID: SSPTALDB1623

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                Web Page for STN Seminar Schedule - N. America
NEWS 1
NEWS 2 JUL 02 LMEDLINE coverage updated
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names
NEWS 4 JUL 02 CHEMCATS accession numbers revised
NEWS 5 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 6 JUL 16 CAplus enhanced with French and German abstracts
NEWS 7 JUL 18 CA/CAplus patent coverage enhanced
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9 JUL 30 USGENE now available on STN
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 11 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 12 AUG 13 CA/CAplus enhanced with additional kind codes for granted
                patents
NEWS 13 AUG 20
                CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 14 AUG 27
                Full-text patent databases enhanced with predefined
                patent family display formats from INPADOCDB
NEWS 15 AUG 27 USPATOLD now available on STN
NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental
                spectral property data .
NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent
                World Patents Index
NEWS 18 SEP 13 FORIS renamed to SOFIS
                INPADOCDB enhanced with monthly SDI frequency
NEWS 19
        SEP 13
NEWS 20 SEP 17
                CA/CAplus enhanced with printed CA page images from
                1967-1998
NEWS 21 SEP 17 CAplus coverage extended to include traditional medicine
NEWS 22 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches
                Zentralblatt
NEWS 24
        OCT 19
                BEILSTEIN updated with new compounds
NEWS 25 NOV 15 Derwent Indian patent publication number format enhanced
NEWS EXPRESS
            19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
             CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
NEWS HOURS
             STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
             Welcome Banner and News Items
NEWS IPC8
             For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 16:17:17 ON 15 NOV 2007

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:17:37 ON 15 NOV 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 15 Nov 2007 VOL 147 ISS 21 FILE LAST UPDATED: 14 Nov 2007 (20071114/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

## => e inalco/paco

'PACO' IS NOT A VALID EXPAND FIELD CODE FOR FILE 'CAPLUS' The indicated field code is not available for EXPAND in this file. To see a list of valid EXPAND field codes, enter HELP SFIELDS at an arrow prompt (=>).

=>	e inalco/pa	
E1	2	INAKEN/PA
E2	7	INAKI/PA
E3	15>	INALCO/PA
E4	15	INALCO S P A/PA
E5	15	INALCO S P A ITALY/PA
E6	1	INALDO/PA
E7	1	INALDO CAMARA FERREIRA DE PAULA/PA
E8	1	INALDO CAMARA FERREIRA DE PAULA BRAZIL/PA

```
E9
             3
                   INALET/PA
E10
             1
                   INALFA/PA
E11
             1
                   INALFA INDUSTRIES B V/PA
E12
                   INALFA INDUSTRIES B V NETH/PA
             1
=> s e3-e5
            15 INALCO/PA
            15 "INALCO S P A"/PA
            15 "INALCO S P A ITALY"/PA
L1
            15 (INALCO/PA OR "INALCO S P A"/PA OR "INALCO S P A ITALY"/PA)
=> d l1 1-15 ibib abs
     ANSWER 1 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
                         2005:429422 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         142:463961
TITLE:
                         Process for the preparation of 1-chloro-3,5-di-O-acyl-
                         2-deoxy-L-ribofuranoside derivatives from
                         2-deoxy-D-galactose via stereoselective chlorination
                         reaction
INVENTOR(S):
                         Tamerlani, Giancarlo; Bartalucci, Debora; Salsini,
                         Liana; Rapaccini, Silvia
PATENT ASSIGNEE(S):
                         Inalco S.p.A., Italy
                         PCT Int. Appl., 17 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                           APPLICATION NO.
                        KIND
                               DATE
                                                                  DATE
     _____
                         ----
                                           -----
     WO 2005044832
                         A1
                                20050519
                                        WO 2004-EP52900
                                                                  20041110
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     CA 2545437
                          A1
                                20050519
                                            CA 2004-2545437
                                                                  20041110
     EP 1699805
                         A1
                                20060913
                                           EP 2004-818161
                                                                  20041110
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
     CN 1878782
                         Α
                               20061213
                                           CN 2004-80033026
                                                                  20041110
     JP 2007510696
                          Т
                                20070426
                                            JP 2006-538856
                                                                  20041110
     US 2007083041
                                20070412
                                           US 2006-578800
                         A1
                                                                  20060509
PRIORITY APPLN. INFO.:
                                            IT 2003-FI288
                                                               A 20031110
                                                              W 20041110
                                           WO 2004-EP52900
```

OTHER SOURCE(S): CASREACT 142:463961; MARPAT 142:463961

GI

Ι

AB Herein described is a process for the preparation of 1-chloro-3,5-di-O-acyl-2-deoxy-L-ribofuranoside derivs. I, wherein R is acyl, useful as intermediates in processes for preparing nucleotides of the L series having antiviral activity. Thus, 1-chloro-3,5-di-O-p-chloro-benzoyl-deoxy-L-ribofuranoside was prepared from 2-deoxy-D-galactose via stereoselective chlorination reaction.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:394996 CAPLUS

DOCUMENT NUMBER:

142:429239

TITLE:

Process for the preparation of galactose from milk or

whey with Lactobacillaceae.

INVENTOR(S):

Cipolletti, Giovanni; Manoni, Marco; Vagnoli, Luana; Giacomelli, Silvia; Biagiolini, Silvia; Pratesi,

Cristina; Camici, Lucia

PATENT ASSIGNEE(S):

SOURCE:

Inalco S.p.A., Italy

PCT Int. Appl., 12 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

	PA	rent i	ΝΟ.			KIN		DATE			APPL	ICAT	ION :	NO.		D.	ATE	
	WO	2005	0392	99				 2005	0506	,	 WO 2	004-	EP52	709		2	0041	028
	WO	2005	0392	99		<b>A</b> 3		2005	0623									
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
									DK,									
									IL,									
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW: BW, GH, GI				GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ, BY, K			KG,	KZ',	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
				TD,														
	CA	2543	862			A1		2005	0506	(	CA 2	004-2	2543	862		2	0041	028
	ΕP	1716	242			A2		2006	1102	]	EP 2	004-8	8045	06		20	0041	028
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	R: AT, BE, CH IE, SI, FI					RO,	CY,	TR,	BG,	CZ,	EE,	ΗU,	PL,	SK			-	
	JP 2007515156							2007	0614	,	JP 2	006-	5373	06		20	0041	028
	US 2007134373							2007	0614	Ţ	US 2	006-	5778	47		20	0604	127
PRIO	IORITY APPLN. INFO.:									:	IT 2	003-1	FI27	5	7	A 20	0031	029
										I	WO 2	004-1	EP52	709	V	v 20	0041	028

AB A process for the preparation of high purity galactose is described, comprising the inoculum, of milk or milk serum not previously subjected to any type of preliminary treatment and/or purification procedure and not containing any bactericides or bacteriostats, with nonmodified microorganisms commonly used in the dairy industry.

L1 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:141119 CAPLUS

DOCUMENT NUMBER: 142:225629

TITLE:

SOURCE:

Sulfated glycosaminoglycans derived from

N-acetylheparosan with high antithrombotic activity in

plasma

INVENTOR(S): Manoni, Marco; Salsini, Liana; Chini, Jacopo;

Cipolletti, Giovanni

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy
PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	CENT	NO.			KIN						ICAT				D.	ATE		
WO	2005	0146	56		A1		2005	0217							2	0040	707	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	
		SN,	TD,	TG														
AU	2004	2625	84		A1		2005	0217		AU 2	004-	2625	84		2	0040	707	
CA	2534	709			A1		2005	0217	(	CA 2	004-	2534	709		2	0040	707	
ΕP	1654	288			A1		2006	0510		EP 2	004-	7661	48		2	0040	707	
	R:						•	FR,	•	•	•	•	•	•	•	•	•	
		ΙE,	SI,	LT,	LV,			MK,										
	1832						2006	0913	(	CN 2	004-	8002	2307		2	0040	707	
	2004				Α		2006	1010		BR 2	004-	1334	6		2	0040	707	
JP	2007	5013	05		T			0125			006-				_	0040	707	
US	2007	0429	93				2007	0222	1	US 2	005-	5575	84		2	0051	115	
	2006				Α			0515								0060	207	
	2006				Α		2007	0622		IN 2	006-	CN77	2		2	0060	303	
RIT	Y APP	LN.	INFO	.:						IT 2	003-	MI16	18	1	A 2	0030	806	
									Ī	WO 2	004-	EP51	391	1	W 2	0040	707	

AB The present invention relates to a process for the preparation of sulfated glycosaminoglycans derived from N-acetylheparosan which comprises: a)
N-deacetylation and N-sulfation of the N-acetylheparosan polysaccharide prepared from natural or recombinant bacterial strain, preferably K5 E. coli, b) enzymic epimerization with the glucuronyl C5-epimerase enzyme, c) partial O-sulfation followed by a partial O-desulfation, d) partial 6-0-sulfation, e) N-sulfation and an intermediate step of controlled depolymn. characterized by the fact that both 0-sulfations (0-sulfation

and 60-sulfation) are partial. Furthermore the invention relates to the products obtained according to the process which show a ratio between the anti-Xa activity and anti-IIa activity equal to or higher than 1 and to compns. comprising said products in combination with suitable and pharmaceutically acceptable excipients and/or diluent.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:652670 CAPLUS

DOCUMENT NUMBER:

141:157383

TITLE:

Process for the preparation of ribofuranose

derivatives from 2-C-methyl-D-ribopentono-1,4-lactone

via regioselective benzoylation and borohydride

reduction as synthons for nucleotides

INVENTOR(S):

Tamerlani, Giancarlo; Salsini, Liana; Lombardi, Ilaria; Bartalucci, Debora; Cipolletti, Giovanni

PATENT ASSIGNEE(S):

Inalco S.P.A., Italy

SOURCE:

U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

 ${\tt English}$ 

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT				KIN	D	DATE				ICAT				D	ATE	
US	2004	1580					2004	0812							2	0030	<del>-</del> 527
US	6891	036			B2		2005	0510									
WO	2004	0698	51		A1		2004	0819		WO 2	004-	EP11	51		2	0040	209
		ΑE,															
							DE,										
							ID,										
							LV,										
	RW:	BW,															
					DK,												
							SI,										
							SN,			•	•	•	•	,	,	,	,
EP	1631					-				EP 2	004-	7092	21		2	0040	209
		ΑT,															
							TR,						,	,	22,	,	,
CN	1747												3778		2	0040	209
PRIORIT											003-						
				•							004-1					0040	
OTHER S	OURCE	(8)			CASI	REAC	ጥ 1 <i>4</i> '	1 • 1 5							n 2	0040	203
GT	001.00		٠		C1-101	·LLAC	1 17.	1.10	, 505	, PLA	IVI AI	T 4 T	. 137.	303			

$$R^{1}O$$
 $Me$ 
 $OR$ 
 $R^{1}O$ 
 $OR$ 
 $I$ 

AB The present invention relates to a new process in 3 steps of

regioselective acylation of 2-C-methyl-D-ribopentono-1,4-lactone, borohydride reduction, and anomeric acylation for the preparation of tetra-acyl ribofuranose derivs. I, wherein R and R1 are independently acyl groups chosen between C1-C6 alkanoyl and C7-C13 aroyl groups, useful as synthons in synthesis of nucleotides. Thus, regioselective benzoylation of 2-C-methyl-D-ribopentono-1,4-lactone with benzoyl chloride gave 3,5-di-O-benzoyl-2-C-methyl-D-ribopentono-1,4-lactone in 70 % yield. Reduction of 3,5-di-O-benzoyl-2-C-methyl-D-ribofuranose in 75 % yield. Benzoylation of 3,5-di-O-benzoyl-2-C-methyl-D-ribofuranose gave title 1,2,3,5-tetra-O-benzoyl-2-C-methyl-D-ribofuranose in 70% yield. REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

REFERENCE COOKI:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:991164 CAPLUS

DOCUMENT NUMBER:

140:23239

TITLE: INVENTOR(S):

O-Sulfated bacterial polysaccharides and their use Manoni, Marco; Miletti, Sandro; Cipolletti, Giovanni;

Abbate, Rosanna; Gori, Maria Anna

PATENT ASSIGNEE(S):

Inalco S.P.A., Italy

SOURCE:

U.S. Pat. Appl. Publ., 17 pp., nones

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KIN	D -	DATE			APPL	ICAT	ION 1	NO.		D	ATE			
		2003		85		A1		2003		;	US 2	003-	3479	92		2	0030	121	
	-	6900		_		B2		2005											
	IT	2002	MI12									002-1				_	0020	612	
	CA	2489	293			A1		2003	1224		CA 2	003-	2489	293		21	0030	612	
	WO	2003	1065	03		A1		2003	1224	1	WO 2	003-	EP61	64		2	0030	612	
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
								IN,											
								MD,								-	-		
								SC,											
								vc,						- •	,	,	,	,	
		RW:						MZ,						ZM.	ZW.	AM.	AZ.	BY.	
								TM,											
								IE,											
								CM,											
	ΙΙΔ	2003															0030		
		1521						2005									0030		
	בים																		
		R:						ES,										PT,	
								RO,							-	-			
	US 2005234014					Al		2005	1020										
PRIO	ORITY APPLN. INFO.:				.:						IT 2	002-1	MI12	94	1	A 2	020	612	
										1	US 2	003-	34799	92	1	A1 2	0030	121	
										7	WO 2	003-	EP61	64	1	W 2	0030	612	

AB The present invention refers to the preparation of O-sulfated, N-sulfated or N-acetylated derivs., both epimerized or non epimerized, of K5, K4, and optionally defructosylated K4 and K40 polysaccharides from Escherichia coli and to their use as antiinflammatory agents in chronic and acute

inflammations. These compds., and in particular O-sulfated, N-acetylated K5 (K5-OSNAc) and O-sulfated, N-sulfated epimerized K5 (K5OSNS epi) obtained according to the present invention show a specific activity on the main cytokines involved in the inflammatory processes inhibiting especially the production of Tumor necrosis factor alpha, interleukin 1 beta and interleukin 6.

REFERENCE COUNT:

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS 18 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:730838 CAPLUS

DOCUMENT NUMBER:

135:267246

TITLE:

Glycosaminoglycans derived from the k5 polysaccharide having high anticoagulant and antithrombotic activity

and process for their preparation

INVENTOR(S):

Zoppetti, Giorgio; Oreste, Pasqua; Cipolletti,

Giovanni

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA!	rent i	NO.			KIN	D	DATE				ICAT				D.	ATE	
	WO	2001	0728	48		A1	_	2001	1004	1						2	0010	 327
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
												ES,						
												ΚP,						
												MX,						
												TR,						
				YU,									·	·		•	•	•
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		•										LU,						
												MR,					•	•
	IT	2000										000-1					0000	330
	IT	1318	432			В1		2003										
	CA	2404	478			A1		2001	1004		CA 2	001-	2404	478		2	0010	327
		1268																
												IT,						
								RO,					•	•				,
	JP	2003								•		001-	5717	79		20	0010	327
	RU	2283	319			C2						002-						
	US	2004	14699	94		<b>A</b> 1						002-2					0021	
		2006															0060	
PRIO		APP										1-000					00003	
										ī	MO 2	001-	EP34	61			0010	
												002-2						
AB	Gly	cosai	nino	glyca	ans o	deri	ved	from	the									

AΒ Glycosaminoglycans derived from the K5 polysaccharide having high anticoagulant and antithrombotic activity obtained by a process comprising the preparation of the K5 polysaccharide from Escherichia coli, N-deacetylation/N-sulfation, C-5 epimerization, supersulfation, selective O-desulfation, selective 6-0 sulfation and N-sulfation, wherein said epimerization is carried out using the glucuronosyl C-5 epimerase enzyme in solution or in immobilized form in presence of specific divalent cations. REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:31672 CAPLUS

DOCUMENT NUMBER:

134:85171

TITLE:

SOURCE:

Process for the preparation of the polysaccharides k4

and k5 from Escherichia coli

INVENTOR(S):

Petrucci, Franco; Zoppetti, Giorgio; Oreste, Pasqua;

Cipolletti, Giovanni

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy
PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	rent :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WO	2001	0025	 97		A1	-	2001	 0111		WO 2	000-	EP61:	22		2	0000	630
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DΚ,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
	HU, ID, II				IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
	LU, LV, MA				MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
	SD, SE, SG				SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
	CF, CG, CI					GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
IT	99MI		A1		2001	0102		IT 1	999-1	MI14	65		19	9990'	702		
PRIORITY	Y APP	LN.	INFO	.:						IT 1:	999-1	MI14	65	7	A 19	9990	702

AB A process is provided for the preparation of the polysaccharides K4 and K5 by fermentation of Escherichia coli on a medium composed of defatted soya flour, mineral salts and glucose, or of the dialyzed portion of yeast autolyzate, mineral salts and glucose. Following fermentation, the polysaccharides were purified from fermentation broth by a process which included centrifugation, ultrafiltration, ethanol precipitation, diafiltration and ion exchange chromatog.

Thus, 820 mg/L of K5 and 420 mg/L of K4 were obtained from batch fermns. on a defatted soya flour medium.

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1999:641009 CAPLUS

DOCUMENT NUMBER:

131:243537

TITLE:

Indole derivatives suitable to be used as chromogenic

compounds

INVENTOR(S):

Zoppetti, Giorgio; Oreste, Pasqua; Cipolletti,

Giovanni; Tamerlani, Giancarlo

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy
PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

## PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		i	APPL	ICAT	ION	. 01		D	ATE	
							-									_		
	WO	9950	438			A2		1999	1007	1	WO 1	999-	EP21	74		1	9990	330
	WO	9950	438			A3		1999	1125									
		W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
			DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
			JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	·LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
			MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
			TM,	TR,	TT,	UA,	ŪG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,
			MD,	RU,	ТJ,	TM												
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
			ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
			CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG					
	IT 1298965							2000	0207		IT 19	1-866	MI664	4		1	9980	330
	AU	9936	024			Α		1999	1018	I	AU 19	999-:	3602	4		1	9990	330
PRIO	RIORITY APPLN. INFO.:										IT 19	1-866	MI 66	4	1	A 1	9980	330
										Ţ	WO 19	999-1	EP21	74	7	W 1	9990	330
7 17	ml.									-	, ,						•	

AB The present invention refers to indole derivs. suitable to be used as chromogenic compds. in free form or in complexed form with cyclodextrins or with cyclodextrin derivs., usable in the diagnostic, microbiol., mol.-biol. field and similar ones. Thus, 6-bromo-3-indolyl- $\beta$ -D-glucuronide cyclohexyl ammonium salt was prepared and its chromogenic property of the inclusion complex with  $\beta$ -cyclodextrin are reported.

L1 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:709086 CAPLUS

DOCUMENT NUMBER: 129:290371

TITLE: Manufacture of lactulose syrup by isomerization of

lactose

INVENTOR(S): Carobbi, Renato; Bimbi, Giuseppe; Cipolletti, Giovanni

PATENT ASSIGNEE(S): Inalco S.p.A., Italy
SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA	CENT :	NO.			KIN	KIND DATE APPLICATION NO.									D	ATE	
						_				<del>-</del> -							
WO	9847	908			A1		1998	1029	1	WO 19	998-1	EP22	45		1:	9980	417
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,
		ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	ŞΕ,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
		UΑ,	ŪG,	US,	UZ,	VN,	YU,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG							
CA	2286	985			A1		1998	1029	(	CA 19	998-	2286	985		19	9980	417
CA	2286	985			С		2007	0327			•						
AU	9875	266			Α		1998	1113	i	AU 19	998-	7526	6		19	9980	417
EP	9756	46			A1		2000	0202	]	EP 19	998-	9227	29		19	9980	417
EP	9756	46			B1												
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	IT,	LI,	NL,	SE,	ΙE,	SI,	FI	

```
T
T
B1
    JP 2002513413
                            20020508 JP 1998-544979
                                                           19980417
    AT 246699
                            20030815
                                      AT 1998-922729
                                                          19980417
    US 6214124
                            20010410
                                      US 1999-402768
                                                          19991011
PRIORITY APPLN. INFO.:
                                      IT 1997-MI889
                                                        A 19970417
                                       WO 1998-EP2245
                                                        W 19980417
```

AB Lactose is isomerized to lactulose by contacting an aqueous solution or suspension of lactose with Na aluminate and neutralizing the resulting mixture with gaseous CO2 under pressure to produce a suspension of aluminum hydroxide which is easily separated from the lactulose solution by filtration. The solid is converted with NaHCO3 to Na aluminate and calcined at 750° to give reconverted Na aluminate. The mother liquor is deionized by passing through an ion exchanger, concentrated at 40° and reduced pressure and cooled to 8-10° for 120-125 h to crystallize residual lactose which is separated by centrifugation to give a title syrup.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:672593 CAPLUS

DOCUMENT NUMBER: 129:261971

TITLE: Glycosaminoglycans having high antithrombotic activity
INVENTOR(S): Casu, Benito; Naggi, Annamaria; Torri, Giangiacomo

PATENT ASSIGNEE(S): <u>Inalco S.p.A., Italy</u> SOURCE: <u>PCT Int. Appl., 19 pp.</u>

CODEN: PIXXD2

...... Dame

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.							DATE					ION I			D.	ATE	
		9842						 1998	1001							1	9980	324
	WO	9842	754			A3		1998	1223									
		W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,
			KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
			UA,	UG,	US,	UZ,	VN,	YU,	zw									
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,
			FR,	GB,	GR,	ΙE,	IT,	LU,	MC;	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,
			GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG								
	CA	2285	383			A1		1998	1001		CA 1	998-	2285	383		1	9980	324
	CA	2285	383			С		2006	0926									
	AU	9870	405			Α		1998	1020		AU 1	998-	7040	5		1	9980	324
	ΕP	9701	30			A2		2000	0112		EP 1	998-	9170	65		1	9980	324
	EP	9701	30			В1		2002	0710									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	NL,	SE,	PT,	ΙE,	FI
	JP	2001	5181	33		T		2001	1009		JP 1	998-	5448	83		1	9980	324
	ΑT	2204	10			T		2002	0715		AT 1	998-	9170	65		1	9980	324
	ES	2180	161			Т3		2003	0201		ES 1	998-	9170	65		1	9980	324
	US	6197	943			В1		2001	0306	1	US 1	999-	3814	51		1	9990	920
PRIO	RIT	Y APP	LN.	INFO	.:						IT 1	997-	MI67	8	1	A 1	9970	324
										,	WO 1	998-	EP17	14	1	w 1	9980	324

AB Glycosaminoglycans having high antithrombotic activity in vitro, are obtained by various kinds of glycosaminoglycans supersulfated by the preparation of the salt of an organic base of the starting supersulfated

glycosaminoglycan, by partial solvolytic desulfation of said salt and N-resulfation of said partially desulfated product.

ANSWER 11 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1998:550445 CAPLUS

DOCUMENT NUMBER:

129:177144

TITLE:

O-Sulfated bacterial polysaccharides

INVENTOR(S):

Zoppetti, Giorgio; Oreste, Pasqua; Cipolletti,

Giovanni

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy PCT Int. Appl., 20 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	rent i				KIN		DATE				LICAT				D	ATE	
WO	9834										 1998-1				1:	9980	204
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR	, BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW	, HU,	ID,	IL,	IS,	JP,	KE,	KG,
		KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU	, LV,	MD,	MG,	MK,	MN,	MW,	MX,
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG	, SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
		UA,	UG,	US,	UZ,	VN,	YU,	ZW	•								
,	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW	, AT,	BE,	CH,	DE,	DK,	ES,	FI,
											, SE,						
		GΑ,	GN,	ML,	MR,	ΝE,	SN,	TD,	TG								
CA	2279	317			A1		1998	0813	(	CA :	1998-2	2279	317		1	99802	204
CA	2279	317			С		2006	0926									
AU	9863	943			Α		1998	0826		AU :	1998-	6394	3		19	99802	204
AU	7231	68			B2		2000	0817									
EP	9583	07			A1		1999	1124		EP :	1998-9	9093	87		19	99802	204
EP	9583	07			В1		2002	0102									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			FI														
	3373						2000	0128	j	NZ :	1998-3	3373	99.		1	99802	204
JP	2001	5105	02		T		2001	0731		JP :	1998-	5337	50		1	99802	204
AT	2114	88			T		2002	0115	Ì	AT :	1998-9	9093	87		1	99802	204
PT	9583	07			T		2002	0628		PT :	1998-9	9093	87		19	99802	204
ES	2169	503			Т3		2002	0701	1	ES :	1998-9	9093	87		19	99802	204
US	6288	044			B1		2001	0911	1	JS :	1999-3	3552	11		19	9990	723
PRIORIT	Y APP	LN.	INFO	.:					:	IT :	1997-i	MI25	2	7	A 19	99702	207
									Ţ	OW	1998-1	EP59	8	V	<b>v</b> 19	99802	204
PT ES US	9583 2169 6288 Y APP	07 503 044 LN. :	INFO	.:	Т Т3 В1		2002( 2002( 2001(	0628 0701 0911	; ] ;	PT ES JS IT	1998-9 1998-9 1999-3 1997-1	9093 9093 3552 MI25 EP59	87 87 11 2 8	<i>)</i>	19 19 19 A 19 V 19	99802 99802 9990 99702 99802	204 204 723 207 204

A process is disclosed for the preparation of O-sulfated K4, K5 and K40 AB polysaccharides useful for the treatment of tumoral, HIV-1 and coaqulation pathologies and in cosmetic prepns., wherein the K4, K5 or K40 polysaccharide in the form of sodium salt is suspended in an aprotic solvent and directly submitted to the reaction of O-sulfation with a pyridine-sulfur trioxide or trimethylamine-sulfur trioxide adduct or with chlorosulfonic acid.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

3

ACCESSION NUMBER:

1997:757036 CAPLUS

DOCUMENT NUMBER:

128:39636

TITLE:

Derivatives of K5 polysaccharide having high

anticoagulant activity

INVENTOR(S):

Zoppetti, Giorgio; Oreste, Pasqua; Cipolletti,

Giovanni

PATENT ASSIGNEE(S):

Inalco S.P.A., Italy

SOURCE:

PCT Int. Appl., 22 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

P	PATENT NO.			KIND DATE			APPLICATION NO.					DATE							
W	WO 9743317		A1				WO 1997-EP2379						19970509						
		W:	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		•						GE,											
								LV,									-		
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UΑ,	UG,	US,	UZ,	VN,	YU
		RW:	GH,	ΚE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	
								NL,											
			ML,	MR,	ΝE,	SN,	TD,	TG								·			
C	A	22538	833			A1		1997	1120	(	CA 1	997-2	2253	833		1	9970	509	
С	CA 2253833 C 20060627																		
Α	U	97302	265			Α		1997	1205	i	AU 1	997-:	3026	5		1	9970	509	
E	EP 897393 A1 19990224 EP 1997-924941 199				9970	509													
E	EP 897393 B1 20011205																		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	NL,	SE,	PT,	ΙE,	FI	
		2101																	
E	ES	2167	748			Т3		2002	0516	]	ES 19	997-9	9249	41		19	9970	509	
U	IS	6162	797			Α		2000	1219	Ţ	JS 1	998-:	1804	06		19	9981	106	
PRIORI	PRIORITY APPLN. INFO.: IT 1996-MI956 A 19960510																		
	· WO 1997-EP2379 W 19970509																		

AΒ Derivs. of the K5 polysaccharide having high anticoagulant activity obtained by a process comprising the N-deacetylation of the K5 polysaccharide followed by N-sulfation, epimerization, O-sulfation and N-resulfation.

ANSWER 13 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1996:464356 CAPLUS

DOCUMENT NUMBER:

125:115073

TITLE:

Process for the preparation of iduronic

acid-containing polysaccharides as anticoagulants and

antithrombotics

INVENTOR(S):

Zoppetti, Giorgio; Oreste, Pasqua; Cipolletti,

Giovanni

PATENT ASSIGNEE(S):

Inalco S.P.A., Italy

SOURCE:

PCT Int. Appl., 29 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9614425	A1	19960517	WO 1995-EP4241	19951030

```
W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP,
             KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
             IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
             NE, SN, TD, TG
     CA 2204366
                          A1
                                19960517
                                            CA 1995-2204366
                                                                    19951030
     AU 9539261
                          Α
                                19960531
                                            AU 1995-39261
                                                                    19951030
     EP 789777
                          A1
                                19970820
                                            EP 1995-937026
                                                                    19951030
     EP 789777
                          B1
                                20000809
        R: AT, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE
     CN 1162339
                          Α
                                19971015
                                            CN 1995-196040
                                                                    19951030
     CN 1094977
                          В
                                20021127
     JP 10508204
                          Т
                                19980818
                                            JP 1996-515019
                                                                    19951030
     JP 3640259
                          B2
                                20050420
     AT 195348
                          T
                                20000815
                                            AT 1995-937026
                                                                    19951030
                          Т3
     ES 2150589
                                20001201
                                            ES 1995-937026
                                                                    19951030
     PT 789777
                          Т
                                20010131
                                            PT 1995-937026
                                                                    19951030
     US 5958899
                          Α
                                19990928
                                            US 1996-628690
                                                                    19960412
PRIORITY APPLN. INFO.:
                                            IT 1994-MI2240
                                                                 A 19941104
                                            WO 1995-EP4241
                                                                 W 19951030
```

AB Process for the preparation of polysaccharides having a high iduronic acid content comprising: (a) N-deacetylation of the polysaccharide K5 from Escherichia coli or of the heparan sulfate or O-desulfation of heparin or heparan sulfate: (b) N-sulfation of the product obtained from the stage (a); (c) epimerization in presence of the C5 epimerase enzyme; (d) sulfation of at least some free hydroxy groups, wherein the stage (c) is carried out in a reaction medium constituted by a classical buffer solution formed by HEPES, potassium chloride, EDTA and TRITON X-100 to which a suitable additive is added.

L1 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:459466 CAPLUS

DOCUMENT NUMBER: 122:197077

TITLE: Process for the preparation of crystalline lactulose

from commercial syrups

INVENTOR(S):
Bimbi, Giuseppe

PATENT ASSIGNEE(S): <u>Inalco</u> S.p.A., <u>Italy</u>

SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAT	TENT NO.			KINI	)	DATE		AP	PLICA	ATIO	N N	ο.		D.	ATE		
	<del>-</del> -				-									_			
EP	622374			A1		1994	1102	EP	1994	-10	618	8		1	9940	421	
EP	622374			В1		1997	1203			•							
	R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IE	E, I	Т,	LI,	LU,	MC,	NL,	PT,	SE
US	5480491			Α		1996	0102	US	1994	-22	955	9		1	9940	418	
AT	160781			T		1997	1215	AT	1994	1-10	618	8		1	9940	421	
CA	2121954			A1		1994	1029	CA	1994	-21	219	54		1	9940	422	
CA	2121954			С		2004	0622										
JP	06319600	)		Α		1994	1122	JP	1994	88-1	434			1	9940	426	
JP	3589357			B2		2004	1117										
PRIORITY	APPLN.	INFO.	:					IT	1993	3-MI	833		1	A 1	9930	128	

AB A process for preparation of crystalline lactulose with ≥98.5% purity is based on evaporation of com. lactulose aqueous syrups at 50-60° and at a pressure of 2660-6650 Pa to a sugar concentration of 70-80 Brix, cooling to 5-20°, and adding crystalline lactulose trihydrate (5-30 parts) as a crystallization initiator. The com. lactulose syrups have the following composition:

50-70% by weight of lactulose, 3-9% by weight of lactose, 3-14% by weight of galactose, and 4-7% by weight of other carbohydrates.

L1 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1991:473896 CAPLUS

DOCUMENT NUMBER:

115:73896

TITLE:

Boron resins as highly selective absorbents for

purification of lactulose

INVENTOR(S):

Carobbi, Renato; Innocenti, Franco

PATENT ASSIGNEE(S):

Inalco S.p.A., Italy

SOURCE:

U.S., 7 pp. Cont.-in-part of U.S. 4,937,295.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5002613	Α	19910326	US 1990-527886	19900524
US 4937295	Α	19900626	US 1988-171436	19880321
PRIORITY APPLN. INFO.:			IT 1987-19966	A 19870403
		<b>V</b>	US 1988-171436	A2 19880321

The resins YZ1N(R1)(R2)Z2CH(OH)CH2Z3C6H4B(OH)2 [Y = acrylic polymer; R1, R2 =alkyl; X = OH, halogen; Z1 = (CH2)0-5; Z2 = (CH2)1-5; Z3 = O, S, imino] are useful in lactulose (I) purification Thus, a crosslinked polymer of 50 g Me acrylate and 2 g 1,4-divinylbenzene was condensed with dimethylethylenediamine, epichlorohydrin, and then with m-aminobenzeneboronic acid to give a resin showing good absorption selectivity for I in chromeatog. purification of sugar mixts.

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST .	50.36	50.57
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-11.70	-11.70